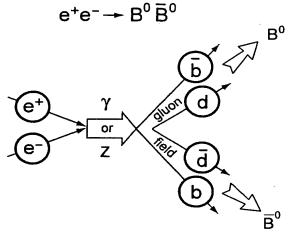
PE VOIG WIR 17 PERSON AND 17 P

Replacement Sheet

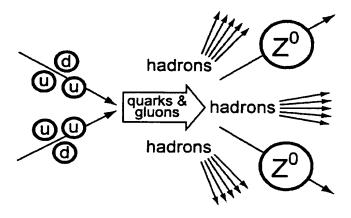
1/9



An electron and positron (antielectron) colliding at high energy, can annihilate to produce B^0 and \overline{B}^0 mesons via a virtual Z boson or a virtual photon.

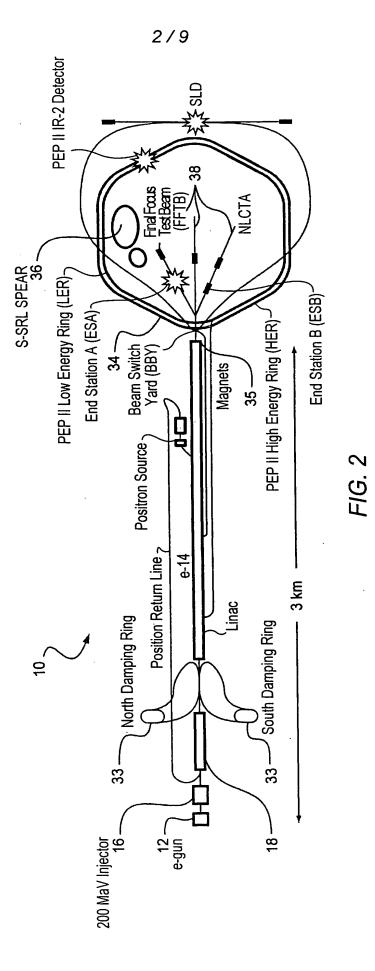
FIG. 1A

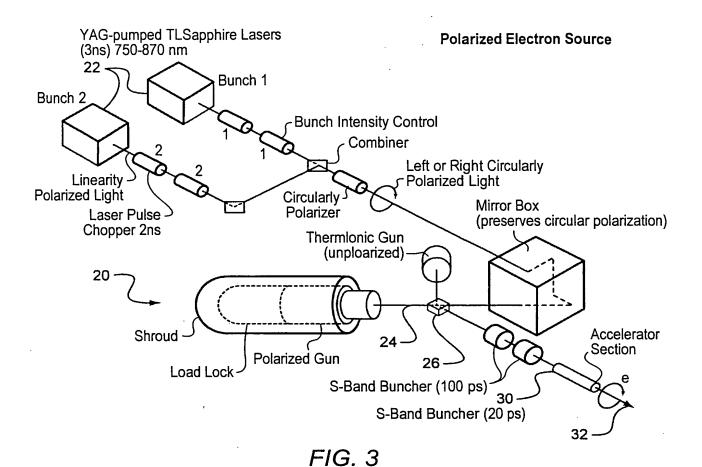
$$p p \rightarrow Z^0 Z^0$$
 + assorted hadrons



Two protons colliding at high energy can produce various hadrons plus very high mass particles such as Z bosons. Events such as this one are rare but can yield vital clues to the structure of matter.

FIG. 1B





Magnet Coil
60

Calorimeter
58

Drift Chamber
54

FIG. 4

4/9

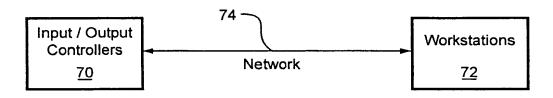


FIG. 5

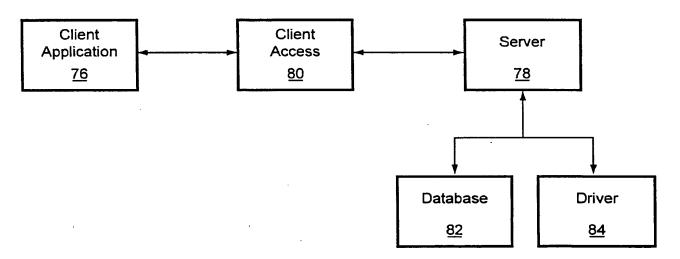


FIG. 6

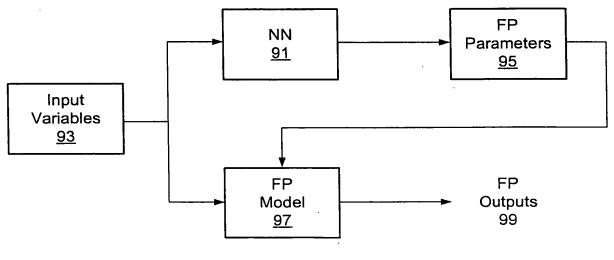


FIG. 7



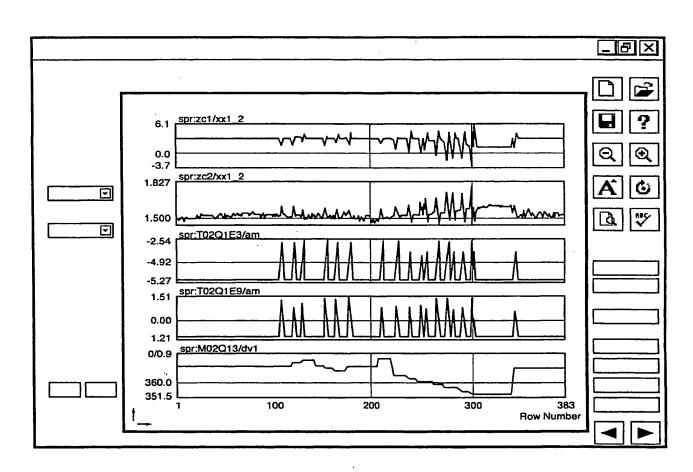
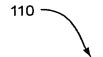


FIG. 8



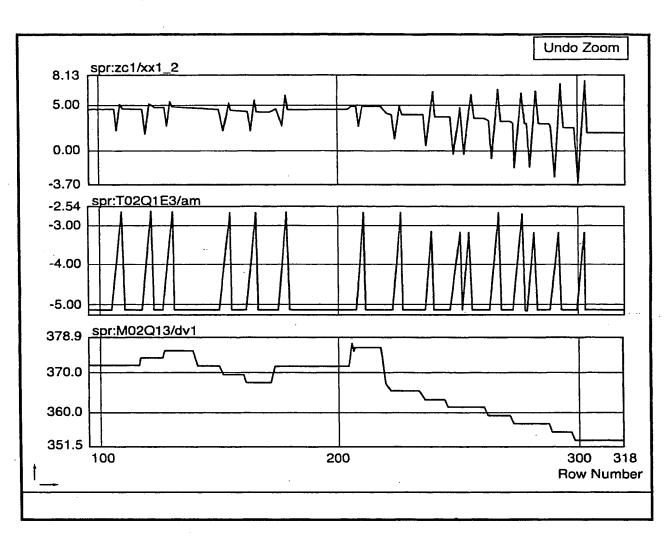
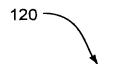


FIG. 9



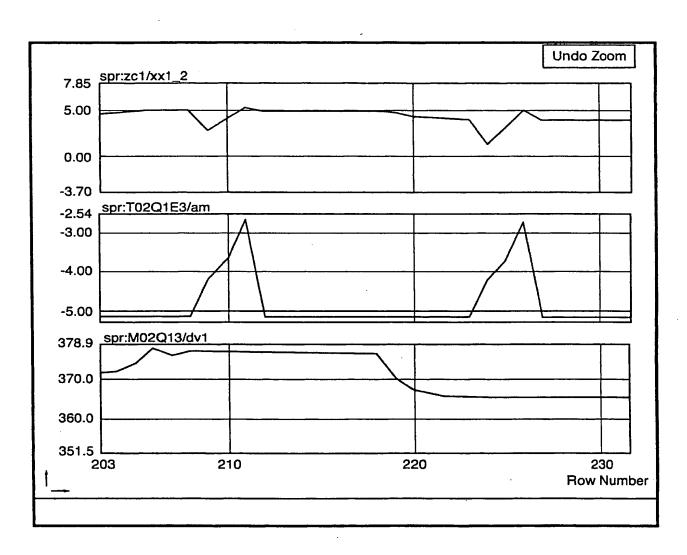


FIG. 10

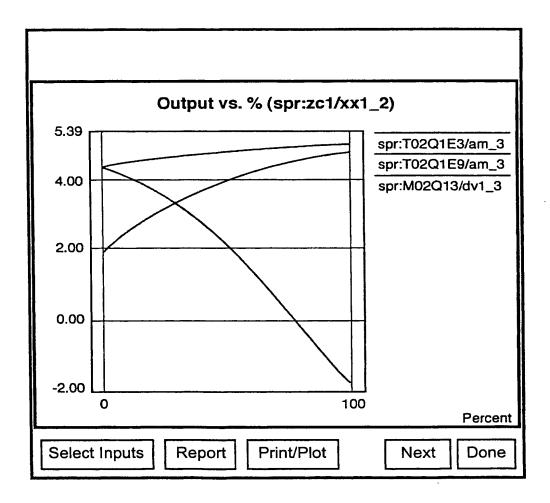


FIG. 11

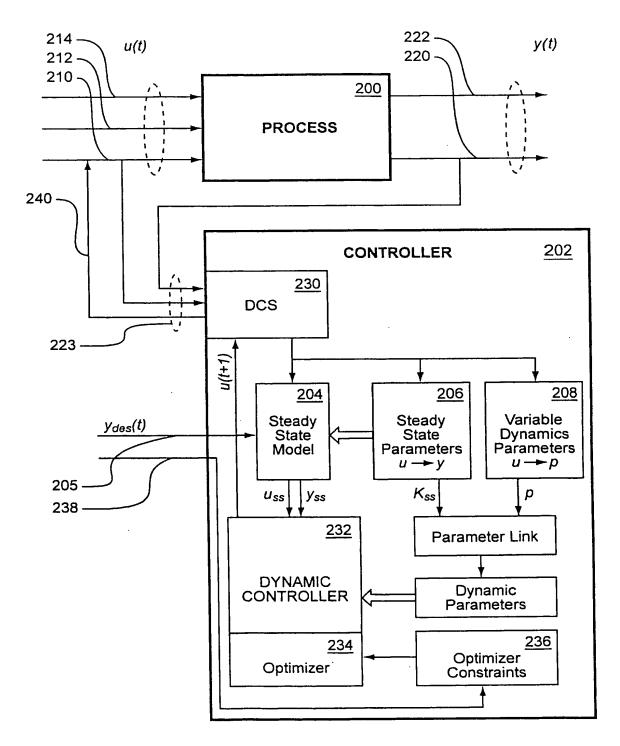


FIG. 12